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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/565,080

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Thomas Huber

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EXAMINER

GREEN, RICHARD R

ART UNIT

PAPER NUMBER

3644

NOTIFICATION DATE

DELIVERY MODE

06/25/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@bakerlaw.com

Office Action Summary	Application No. 10/565,080	Applicant(s) HUBER, THOMAS	
	Examiner Richard R. Green	Art Unit 3644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-17,19-21,24,27-29,32,33,36 and 38-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-17,19-21,24,27-29,32,33,36 and 38-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 21, 24, 33 and 36 are rejected under 35 U.S.C. 102(b) as being
anticipated by U.S. Patent 5,927,650 to Huber.

Regarding claims 21, 24 and 33: Huber teaches a pre-fabricated floor module for installation into an aircraft, comprising:

A floor element (10) having roller elements (14) for transporting and securing freight;

Supporting beams (21) connected to the floor element and adapted for connection to a skin of an aircraft to form at least part of a floor of a cargo compartment (c. 3, l. 12-31: the bearing extensions are adapted to connect to ribs of the aircraft, which ribs are connected to the skin; the floor elements form at least part of the cargo floor when assembled);

Sections of conducting devices (19) located in the floor module, wherein at least one of said conducting devices is a hydraulic conduit, and wherein the conducting devices are configured and adapted for connection with another section of the same kind in an adjacent floor module (c. 2, l. 20-32: channels are formed for installation of hydraulic conduits); and

A plurality of assembly elements connected to said floor element and adapted to connect said floor module to adjacent floor modules during installation (c. 3, ¶. 25-32).

Regarding claim 36: the supporting beams (21) span an entire width of the cargo deck transverse to a longitudinal direction of the aircraft (considering a longitudinal direction as being that of the wingspan, the beams fill the span of the cargo deck in a transverse direction, since the cargo deck is provided by the installation of the floor modules and ends with the last placed modules fore or aft).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 27-29, 32, 38 and 39 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Huber.

Regarding claims 27-29, 32, 38 and 39: the floor module appears to be assembled prior to installation in the aircraft (c. 1, ¶. 36-39: the module is a device "for installation in an aircraft deck"), however in the event that this is not explicitly, inherently or implicitly set forth, it would have been obvious to a person having ordinary skill in the art at the time of the invention to assemble the module prior to installation in the aircraft, such as by assembling it while the aircraft is being assembled, in order to shorten the overall time needed to assemble the aircraft.

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Claims 1, 3, 5, 6, 8, 15-17, 19, 20, 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,090,639 to Miller et al. in view of U.S. Patent 6,101,766 to Mogensen.

Regarding claims 1, 3, 5, 6, 19 and 20: Miller teaches an aircraft (100) where cargo is stored in the same compartment as passengers (fig. 12). Miller is silent on the provision of a lavatory on the aircraft.

Mogensen teaches a lavatory for installation into a compartment (2) having a floor (12), comprising:

a functional unit (3) comprising a waste water tank (7) and a pipe connector (41) which connect to corresponding pipe connectors on the floor (c. 5, l. 60-64), and

a pallet (50) supporting the waste water tank (7), the pallet being adapted for the transportation of said functional unit into the compartment (c. 4, l. 4-12: the module part is adapted to be carried into the craft pre-assembled) and being provided with a fixation means that provides a stable connection to the floor (c. 8, l. 7-13: the module parts, including part 50, are fastened to the floor 12);

guide means (80) adapted to guide the functional unit (c. 8, l. 5-7);

at least one section of a partition (55) is mounted on the pallet (50), and the waste water tank (7) is mounted on the partition (c. 6, l. 30-31); and

wherein the waste water tank and partition are mounted to the pallet outside the craft and then brought inside the craft, fixed in place, and then the pipe connected is connected to the floor (c. 4, l. 6-15; c. 7, l. 46-56).

Mogensen teaches that the invention may be installed in aircraft (c. 1, l. 13-26).

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It would have been obvious to a person having ordinary skill in the art at the time of the invention to install the modular bathroom of Mogensen in the aircraft of Miller for the purpose of providing a bathroom for the passengers riding thereon. The bathroom would be installed on the floor of Miller, which is shared by cargo and passengers.

Regarding claims 8, 15-17: the floor of Miller (see fig. 9) comprises floor elements (108) that are connected to supporting beams (116) to form prefabricated floor modules, the floor elements comprising insulating devices attached below the floor elements (c. 8, ¶. 36-40: the panels are made with a central layer of balsa wood, which is insulating, and two layers of aluminum; the top layer of aluminum may be considered as the floor element beneath which is attached the balsa wood);

The modules comprise a fixation device for a partition wall (fig. 9, at 114; this attaching member is capable of use with a partition wall).

Regarding claims 40 and 41: Mogensen also teaches an electronics box (62) comprising a connection lead (63) connected to a corresponding connection lead in the floor (c. 6, ¶. 41-49; fig. 7: connection lead 63 heads downward from the electronics box 62), which is mounted to a pallet (51) outside the craft before loading and installation (in the same manner as described regarding the waste water tank above), which pallet is provided with a fixation means to provides a stable connection to the floor (c. 8, ¶. 7-13).

Claims 7 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mogensen in view of Miller as applied to claim 5 above, and further in view of U.S. Patent 3,912,206 to Jong.

Regarding claim 7: Both Mogensen and Miller are silent to sealing means which seal the partition to parts of the aircraft.

Jong teaches that modular aircraft monuments must be sealed to the floor to prevent spilled water from leaking under the unit (c. 1, l. 25-31), and provides a modular lavatory unit with seal strips mounted about the periphery of the unit's floor to seal the unit to the floor (c. 1, l. 45-53). It would have been obvious to a person having ordinary skill in the art at the time of the invention to install the seal strips of Jong on the module of Mogensen when installing the module in the aircraft of Miller, for the purpose of making a watertight seal with the floor to prevent damage to the aircraft structure beneath.

Regarding claim 12: Both Mogensen and Miller are silent to sealing devices of the floor elements. However, Miller teaches that the containers to be loaded in the cargo floor may be exposed to rainwater during placement on the aircraft (c. 7, l. 2-5).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to install the seal strips of Jong on the floor panels of Miller, as modified by Mogensen, for the purpose of preventing water damage to the aircraft structure beneath, from rainwater on loaded containers.

Claims 8-11, 13, 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller in view of Mogensen as applied to claim 1 above, and further in view of U.S. Patent 5,922,108 to Falcey.

Regarding claims 8-11, 14 and 17: Mogensen and Miller are both silent to conduits or cables in the floor.

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Falcey teaches modular floor panels for use in aircraft (c. 5, ¶. 48-50), which floor panels comprise:

Floor elements (20) that are connected to supporting beams (such as in fig. 13b) to form prefabricated floor modules (c. 10, ¶. 2-29);

Sections of conducting devices comprising cable channels and water conduits (c. 6, ¶. 40-45) provided in such a way that those in one floor module connect with others of the same kind in adjacent floor modules to form overall conducting systems on installation (c. 6, ¶. 56-60);

Wherein at least one of the conducting devices comprises a branch adapted for connection to a prespecified place on either a floor element or a functional unit (c. 6, ¶. 67 - c. 7, ¶. 15: the service wells provide access for connection to the conduits routed in the channels);

A plurality of assembly elements are provided to connect each of said floor modules to adjacent floor modules (such as elements 24 in fig. 12; see also figs. 4A-D);

A fixation device (48C) capable of use for fixing a partition wall from above (c. 9, ¶. 49-53);

Wherein drainage devices are provided to carry a liquid into a corresponding drainage device of an adjacent floor module (c. 6, ¶. 57-66: the channels interconnect and may be sloped to allow liquid to flow with gravity).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to use modular flooring such as taught by Falcey in the floor of the aircraft of Miller, as modified by Mogensen, for the purpose of providing an easily

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installed floor providing conduits for water and electricity in an accessible manner (Falcey c. 11, l. 33-39).

Regarding claim 13: Falcey is silent on leakproof connecting elements, however when providing sloped channels specifically for the gravity pull of liquids (c. 6, l. 57-66), and providing linings for the prevention of leaks (c. 6, l. 5-9), it would have been obvious to a person having ordinary skill in the art at the time of the invention to construct the panels with leakproof connections to prevent fluids from leaking at panel joints.

Response to Arguments

Applicant's arguments, see page 9, ¶ 1, filed 3/15/2010, with respect to the drawing objections for failing to show a pipe connector connecting to a pipe connector beneath or in the floor have been fully considered and are persuasive. The objection of 12/14/2009 has been withdrawn.

Applicant's arguments with respect to claims 1, 3, 5-17, 19-21, 24, 27-29, 32, 33, 36 and 38-41 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard R. Green whose telephone number is (571)270-5380. The examiner can normally be reached on Monday - Thursday 8:00 am - 6:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mansen can be reached on (571)272-6608. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. R. G./
Examiner, Art Unit 3644

/Tien Dinh/

Primary Examiner, Art Unit 3644